SCHC over LoRaWAN draft 02

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LPWAN

LoRaWAN 3 device classes

Class A — TX (uplink), RX1, RX2 — Downlink opportunities

Class B — RXB, TX (uplink), RXB, RX1, RX2, RXB, RXB — Class A Downlink opportunities, periodic classB RX slots

Class C — RXC, TX (uplink), RXC, RX1, RXC, RX2, RXC — Class A Downlink opportunities, continuous classC RX slot

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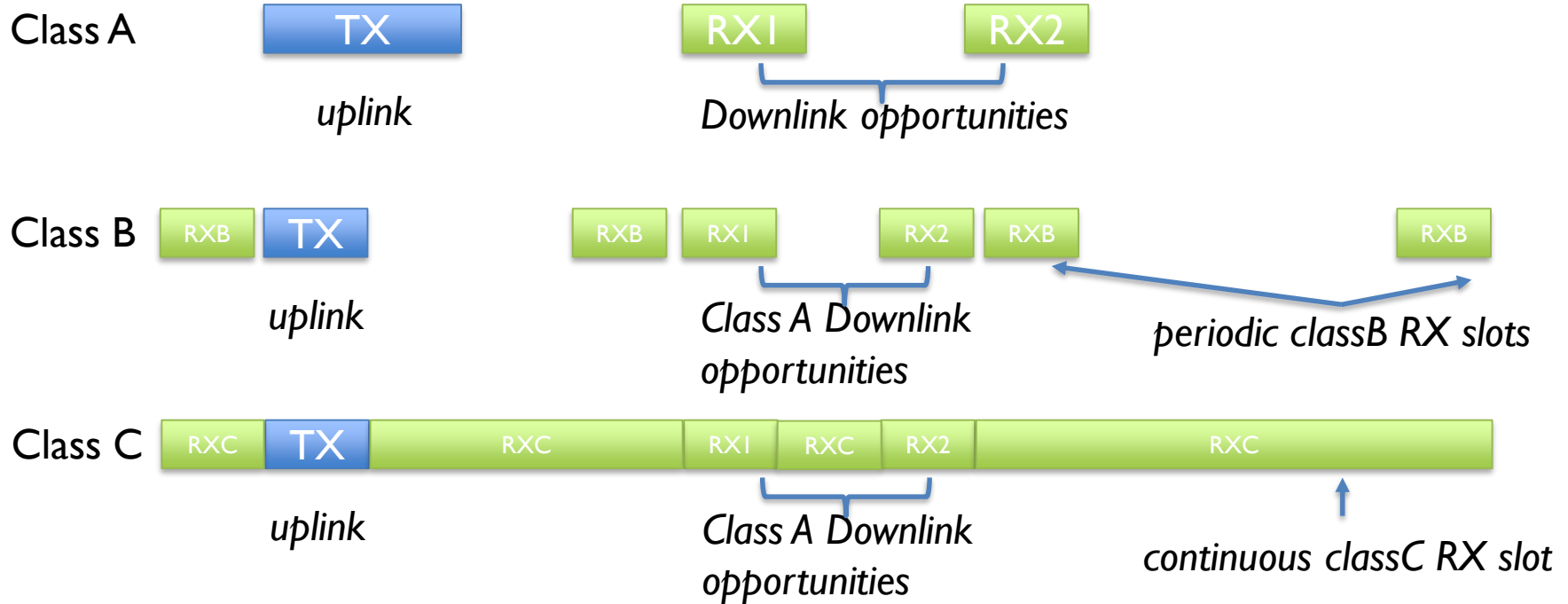
Document status

- LoRaWAN architecture & mapping to SCHC ☑ components

- Uplink & downlink Fragmentation ☑
    With Different parameters for class A/B/C

Seeking feedback

- Current draft encodes RuleID on 3 bits
  - This leaves 7 RuleIDs for header compression

  Is that enough ?
  - Typical COAP requests works with 3 rules
    - Unconfirmed POST, conf POST, conf GET
  - We need to learn more about real use-cases

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To be done

- Security model
- Describe specificities of 3 device classes classA, B & C regarding IPV6 applications
- Provide detailed frame exchange examples

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our feedback on SCHC

Like:

- the overall simplicity

- the fragmentation scheme

Desired addition:

- Implicit introduction & conclusion rule : *would allow using SCHC even for non-SCHC simple legacy devices*

- A way for device to send rule(s) to SCHC gateway : *out-of-band gateway rule provisioning is going to be complicated*

Draft adoption

We are asking the workgroup to adopt the draft

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